

Research: Clean Air Program/Project by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Particulate Matter	\$60.9	184.8	\$65.2	182.1	\$64.4	183.1										
Effects of short-term exposure to particulate matter	\$19.8	56.4	\$18.6	49.8	\$19.2	50.1										
Effects of long-term exposure to particulate matter	\$16.1	47.5	\$17.9	44.8	\$16.4	45.0										
Implementation of the fine particle NAAQS	\$16.1	59.1	\$18.7	62.0	\$19.0	62.3										
Implementation to address residual non-attainment	\$8.9	21.8	\$10.0	25.5	\$9.8	25.7										
Tropospheric Ozone	\$4.0	11.5	\$1.6	8.8	\$1.0	8.8										
Implementation tools	\$4.0	11.5	\$1.6	8.8	\$1.0	8.8										
Air Toxics	\$17.0	55.6	\$16.2	55.5	\$12.6	52.6										
Reduce uncertainty in air toxics risks	\$11.3	35.9	\$9.2	33.1	\$7.9	30.9										
Implement risk reduction of air toxics	\$5.7	19.7	\$7.1	22.4	\$4.7	21.7										
Clean Air¹							\$78.9	236.2	\$80.5	269.5	\$81.9	269.5	\$85.3	265.6	\$3.4	(3.9)
Reduce uncertainty in standard setting and air quality management decisions							\$37.2	145.4	\$40.2	171.5	\$41.2	172.0	\$44.5	171.7	\$3.3	(0.3)
Assess source-to-health linkages and reduce uncertainty							\$41.8	90.8	\$40.3	98.0	\$40.7	97.5	\$40.8	93.9	\$0.1	(3.6)
Total	\$81.9	251.9	\$83.0	246.4	\$78.1	244.5	\$78.9	236.2	\$80.5	269.5	\$81.9	269.5	\$85.3	265.6	\$3.4	(3.9)

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

¹ In FY 2008, the Particulate Matter, Tropospheric Ozone, and Air Toxics MYPs were combined to form the Air MYP.

Research: Drinking Water Program/Project by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Drinking Water																
Regulated Contaminants	\$22.6	72.5	\$18.7	71.0	\$17.0	69.8										
Unregulated Contaminants	\$22.4	121.4	\$23.0	119.6	\$25.1	119.8										
Distribution systems and source water protection	\$3.7	21.8	\$3.5	19.0	\$6.2	19.1										
Characterize risks associated with drinking water sources, treatment, distribution, and use ¹							\$12.4	66.5	\$10.1	54.6	\$10.5	54.6	\$11.8	49.2	\$1.3	(5.4)
Control, manage, and/or mitigate potential health risks ¹							\$35.2	140.7	\$36.7	135.6	\$38.7	135.6	\$40.5	141.6	\$1.8	6.0
Total	\$48.7	215.7	\$45.2	209.6	\$48.3	208.6	\$47.6	207.2	\$46.9	190.2	\$49.2	190.2	\$52.3	190.8	\$3.1	0.6

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

¹ In FY 2009, ORD revised its Long Term Goal structure within the Drinking Water program. This was made retroactive to the FY 2008 Enacted.

Research: Water Quality Program/Project by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Water Quality																
Criteria to support designated uses	\$22.9	118.8	\$22.7	114.5	\$22.6	112.9										
Assessment of aquatic systems impairment	\$9.9	51.3	\$12.7	60.0	\$12.8	59.3										
Protection and restoration of aquatic systems	\$9.9	49.5	\$13.5	62.3	\$19.8	62.7										
Biosolids	\$2.3	10.6	\$2.4	10.5	\$1.8	10.5										
Criteria development ^{1,2}							\$20.1	101.9	\$23.2	98.5	\$20.8	98.5	\$17.6	82.4	(\$3.1)	(16.1)
Watershed management: assessment, measures, and incentives ^{1,2}							\$30.0	111.4	\$30.1	112.3	\$34.9	112.3	\$44.5	133.4	\$9.7	21.1
Source control and management research: urban uses ¹							\$5.8	26.1	\$6.0	26.0	\$6.3	26.0	\$6.7	29.1	\$0.4	3.1
Total	\$45.0	230.2	\$51.3	247.3	\$57.0	245.4	\$56.0	239.4	\$59.3	236.8	\$61.9	236.8	\$68.9	244.9	\$6.9	8.1

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

¹ In FY 2009, ORD revised its Long Term Goal structure within the Water Quality program. This was made retroactive to the FY 2008 Enacted.

Research: Land Preservation and Restoration Program/Project by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Contaminated Sites	\$31.1	96.0	\$25.6	93.5	\$23.0	92.0										
Contaminated Sediments	\$7.8	26.3	\$7.3	24.0	\$7.4	27.2										
Ground Water	\$4.9	9.4	\$5.2	11.6	\$5.3	15.5										
Soils/Land	\$3.6	13.8	\$2.3	5.8	\$1.0	5.6										
Multi-media ²	\$14.7	46.5	\$10.8	52.1	\$9.3	43.6										
Hazardous Wastes	\$9.1	48.2	\$11.6	51.6	\$10.4	50.8										
RCRA Corrective Action Support	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0										
Waste Management	\$2.6	12.6	\$5.2	18.6	\$3.6	18.3										
Multi-Media Decision Making	\$6.4	35.6	\$6.4	33.0	\$6.8	32.5										
Land¹							\$32.0	141.3	\$35.7	154.7	\$36.3	154.7	\$34.0	150.7	(\$2.3)	(4.0)
Land Restoration							\$21.2	90.9	\$22.1	95.9	\$22.2	95.9	\$20.2	93.4	-\$2.0	-2.5
Materials Management and Emerging Issues							\$10.8	50.4	\$13.6	58.8	\$14.1	58.8	\$13.8	57.3	-\$0.3	-1.5
Total	\$40.2	144.2	\$37.2	145.1	\$33.4	142.8	\$32.0	141.3	\$35.7	154.7	\$36.3	154.7	\$34.0	150.7	(\$2.3)	(4.0)

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

¹ In FY 2009, ORD revised its Long Term Goal structure within the Land program. This was made retroactive to the FY 2008 Enacted.

²Contains the Superfund Innovation Technology Evaluation (SITE) program, which was discontinued in FY 2007.

Research: Computational Toxicology Program/Project by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Safe Pesticides/Safe Products (SP2)																
Predictive Tools	\$12.0	24.1	\$12.3	36.8	\$14.7	34.3	\$11.5	34.3	\$15.2	32.7	\$20.0	32.7	\$21.9	34.6	\$1.8	1.9
Total	\$12.0	24.1	\$12.3	36.8	\$14.7	34.3	\$11.5	34.3	\$15.2	32.7	\$20.0	32.7	\$21.9	34.6	\$1.8	1.9

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

Research: Endocrine Disruptors Program/Project by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Endocrine Disrupting Chemicals	\$10.1	50.3	\$10.2	53.6	\$10.2	53.6	\$9.9	53.2	\$11.1	48.9	\$11.0	48.9	\$17.4	44.2	\$6.4	(4.7)
EDCs' effects, exposure, assessment and management	\$5.3	20.3	\$5.3	22.0	\$4.8	22.0	\$4.6	22.5	\$5.9	21.7	\$5.9	21.7	\$10.8	20.0	\$4.9	(1.7)
Extent of impact of EDCs	\$2.5	15.4	\$2.5	15.7	\$2.7	15.7	\$2.5	14.9	\$2.7	14.4	\$2.7	14.4	\$4.2	11.6	\$1.5	(2.8)
Screening and testing	\$2.3	14.6	\$2.4	15.9	\$2.7	15.9	\$2.8	15.8	\$2.4	12.8	\$2.4	12.8	\$2.3	12.6	(\$0.0)	(0.2)
Human Health	\$0.3	1.2	\$0.3	1.2	\$0.3	1.2	\$0.3	1.2	\$0.4	1.2	\$0.3	1.2	\$0.0	0.0	(\$0.3)	(1.2)
Susceptible Subpopulations	\$0.3	1.2	\$0.3	1.2	\$0.3	1.2	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0
Cumulative Risk	\$0.0	0.0	\$0.0	0.0	\$0.0	0.0	\$0.3	1.2	\$0.4	1.2	\$0.3	1.2	\$0.0	0.0	(\$0.3)	(1.2)
Total	\$10.4	51.5	\$10.5	54.8	\$10.5	54.8	\$10.2	54.4	\$11.5	50.1	\$11.4	50.1	\$17.4	44.2	\$6.0	(5.9)

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

Research: Fellowships by Research Area
(Dollars in Millions)

ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Other Fellowships ¹	\$1.6	0.3	\$1.6	0.4	\$1.6	0.4	\$1.5	0.4	\$2.0	0.5	\$2.2	0.5	\$2.2	0.6	(\$0.0)	0.1
STAR Fellowships	\$10.4	2.2	\$10.1	2.4	\$8.5	2.4	\$8.1	2.3	\$7.7	2.1	\$8.9	2.1	\$15.1	4.4	\$6.2	2.3
Total	\$12.0	2.5	\$11.7	2.8	\$10.1	2.8	\$9.7	2.7	\$9.7	2.6	\$11.1	2.6	\$17.3	5.0	\$6.2	2.4

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

¹ Includes Greater Research Opportunities (GRO), American Association for the Advancement of Science (AAAS), Association of Schools of Public Health (ASPH), and Marshall Scholarship programs.

Research: Global Change Program/Project by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Global Change																
National/Regional Assessment	\$4.9	9.2	\$5.1	10.0	\$4.7	8.0										
Air Quality	\$7.4	14.4	\$7.0	13.4	\$5.9	12.7										
Ecosystems	\$6.4	12.2	\$5.7	10.4	\$3.8	11.0										
Water Quality	\$0.6	2.1	\$0.5	2.0	\$0.3	2.1										
Human Health	\$0.3	1.5	\$0.3	1.4	\$1.5	1.5										
Climate Change and Air Quality ¹							\$8.2	15.1	\$8.7	18.9	\$12.7	19.7	\$11.4	22.0	(\$1.4)	2.3
Climate Change and Water Quality/Aquatic Ecosystems ¹							\$8.3	13.7	\$7.6	13.1	\$6.4	12.1	\$9.0	14.7	\$2.6	2.6
USGCRP Assessments ¹							\$1.6	3.7	\$1.6	3.6	\$1.7	3.7	\$1.7	3.4	(\$0.1)	(0.3)
Total	\$19.6	39.5	\$18.6	37.1	\$16.2	35.3	\$18.1	32.6	\$17.9	35.5	\$20.8	35.5	\$22.0	40.1	\$1.2	4.6

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

¹ In FY 2009, ORD revised its Long Term Goal structure within the Global Change program. This was made retroactive to the FY 2008 Enacted.

ORD's Homeland Security: Preparedness, Response, and Recovery
Program/Project Resources by Research Area
(Dollars in Millions)

	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2010 vs. FY 2009 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
ORD Long-Term Goal																
Decontamination and Consequence Management	\$2.1	4.6	\$11.7	23.3	\$14.7	23.6	\$12.8	23.5	\$14.3	23.7	\$14.4	23.8	\$13.1	29.0	(\$1.3)	5.2
Water infrastructure Protection	\$11.5	20.1	\$9.9	15.8	\$10.7	15.6	\$10.6	15.6	\$10.5	15.3	\$10.0	15.3	\$9.1	17.7	(\$0.9)	2.4
Threat and Consequence Assessment	\$11.0	15.7	\$10.1	11.8	\$10.2	11.7	\$10.0	11.8	\$12.2	18.5	\$10.6	18.4	\$8.5	17.6	(\$2.1)	(0.8)
Total	\$24.6	40.4	\$31.7	50.9	\$35.6	50.9	\$33.4	50.9	\$37.0	57.5	\$35.0	57.5	\$30.7	64.3	(\$4.3)	6.8

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

Research: Human Health and Ecosystems Program/Project by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Ecosystems	\$86.5	325.5	\$86.3	299.1	\$79.3	295.6	\$71.8	288.6	\$71.0	272.4	\$70.7	272.4	\$69.2	258.5	(\$1.5)	(13.9)
Assess ecosystem condition	\$38.6	108.5	\$34.2	99.2	\$31.3	97.8	\$26.5	99.8							\$0.0	0.0
Protect and restore aquatic ecosystems	\$7.8	35.6	\$10.7	34.1	\$8.2	33.9	\$7.4	34.1							\$0.0	0.0
Ecosystem diagnosis	\$17.6	81.4	\$17.9	75.6	\$17.5	75.6	\$16.9	74.4							\$0.0	0.0
Ecosystem Forecasting	\$22.5	100.0	\$23.5	90.2	\$22.3	88.2	\$21.0	80.3							\$0.0	0.0
Decision Support Platform ¹									\$10.3	38.4	\$13.3	38.9	\$11.8	36.0	(\$1.5)	(2.9)
Mapping Monitoring, and Modeling ^{1,2}									\$42.4	167.3	\$40.6	167.1	\$20.5	71.4	(\$20.1)	(95.7)
Nitrogen Assessment ¹									\$2.8	6.6	\$1.6	6.6	\$4.4	18.7	\$2.8	12.1
Ecosystem Type Assessment ¹									\$4.1	15.2	\$3.8	15.1	\$13.9	58.4	\$10.1	43.3
Place Based Projects ¹									\$11.3	44.9	\$11.4	44.7	\$18.6	74.0	\$7.2	29.3
Human Health	\$60.2	171.9	\$61.6	193.0	\$60.8	187.9	\$63.2	185.7	\$59.4	195.0	\$65.2	195.2	\$63.2	198.9	(\$2.0)	3.7
Mechanistic Data to reduce uncertainty	\$9.9	40.3	\$11.0	51.1	\$10.5	49.1									\$0.0	0.0
Aggregate and Cumulative Risk	\$17.5	50.4	\$17.3	49.5	\$16.9	47.5									\$0.0	0.0
Susceptible Subpopulations	\$30.0	77.6	\$31.3	88.9	\$32.0	87.8	\$28.4	71.7	\$26.8	72.5	\$27.4	72.8	\$29.6	76.8	\$2.3	4.0
Evaluating public health outcomes	\$2.8	3.6	\$2.0	3.5	\$1.5	3.5									\$0.0	0.0
Use of Mechanistic Information ¹							\$9.3	46.6	\$9.0	48.9	\$9.3	48.5	\$10.2	51.5	\$0.9	3.0
Cumulative Risk ¹							\$20.9	57.3	\$19.5	62.9	\$24.3	63.2	\$18.9	58.5	(\$5.4)	(4.7)
Assess risk management decisions ¹							\$4.6	10.2	\$4.1	10.7	\$4.2	10.7	\$4.4	12.0	\$0.3	1.3
Mercury	\$5.2	7.2	\$3.7	12.7	\$3.9	13.1	\$3.9	13.1	\$4.1	10.8	\$4.3	10.6	\$1.8	7.5	(\$2.5)	(3.1)
Mercury source characterization and treatment	\$3.7	5.2	\$3.4	10.9	\$3.4	10.3	\$2.9	10.3	\$3.1	8.9	\$3.2	8.7	\$1.8	7.5	(\$1.4)	(1.2)
Transport and fate of mercury and its effects on receptors	\$1.5	2.0	\$0.3	1.8	\$0.4	2.8	\$0.9	2.8	\$1.0	1.9	\$1.1	1.9	\$0.0	0.0	(\$1.1)	(1.9)
Emerging Risk Issues and Risk Policy Assessment Forum	\$15.5	15.7	\$11.3	5.0	\$12.2	12.7	\$10.3	9.6	\$14.4	6.7	\$14.4	6.7	\$14.9	10.4	\$0.5	3.7
Advanced Monitoring Initiative	\$0.0	0.0	\$4.9	0.0	\$5.1	0.0	\$4.9	0.0	\$4.9	0.0	\$5.0	0.0	\$5.1	0.0	\$0.1	0.0
Total	\$167.4	520.3	\$167.7	509.8	\$161.2	509.3	\$154.2	497.0	\$153.8	484.9	\$159.5	484.9	\$154.1	475.3	(\$5.4)	(9.6)

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

¹ In FY 2009, ORD revised its Long Term Goal structure within the Ecosystems and Human Health programs. For Human Health, this was made retroactive to the FY 2008 Enacted.

² In the FY 2011 President's Budget Request, ORD is shifting FTE within MYP to correct the base, with no changes in research.

Human Health Risk Assessment Program/Project by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Human Health Risk Assessment																
Human Health Risk Assessment and IRIS	\$19.8	91.8	\$20.8	99.5	\$22.0	98.0	\$24.9	110.5	\$25.1	109.5	\$30.8	121.4	\$30.8	118.5	(\$0.0)	(2.9)
Risk Assessment Research, Methods, Guidance, and Risk Assessment Forum	\$12.2	57.0	\$14.1	59.3	\$12.4	61.2	\$11.7	46.3	\$10.5	44.0	\$10.4	42.8	\$8.9	41.0	(\$1.4)	(1.8)
Integrated Science Assessments ¹	\$4.2	23.5	\$4.5	25.2	\$4.6	24.7	\$6.1	25.3	\$7.1	25.0	\$7.0	24.4	\$9.3	43.4	\$2.2	19.0
Total	\$36.3	172.3	\$39.4	184.0	\$39.1	183.9	\$42.7	182.1	\$42.7	178.6	\$48.2	188.6	\$49.0	202.8	\$0.8	14.2

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

¹ In FY 2008, ORD revised its process for supporting the setting of the NAAQS. The LTG was previously titled "Air Quality Criteria Documents."

Research: Pesticides and Toxics by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Food Quality Protection Act (FQPA)	\$1.6	9.1														
FQPA risk assessment ¹	\$1.6	9.1														
Pollution Prevention	\$1.7	0.0														
Pollution Prevention Tools ²	\$1.7	0.0														
Safe Pesticides/Safe Products (SP2)	\$24.5	130.3	\$30.4		\$26.0	122.2	\$25.6	126.3	\$26.9	137.4	\$27.3	137.4	\$27.6	136.3	\$0.3	(1.1)
Predictive tools	\$9.8	57.8	\$12.6	50.3	\$10.1	49.8										
Wildlife risk assessment	\$7.2	45.0	\$8.6	46.2	\$8.2	45.8										
Chemical risk reduction	\$5.2	12.5	\$5.8	15.7	\$5.8	15.5										
Evaluation of new hazards	\$2.3	15.0	\$3.2	11.2	\$1.9	11.1										
Predictive tools for risk assessment ^{3,4}							\$3.5	18.2	\$3.7	19.1	\$3.8	19.1	\$13.4	68.1	\$9.6	49.0
Wildlife risk reduction ^{3,4}							\$16.9	93.0	\$19.3	104.6	\$19.6	104.6	\$12.0	57.4	(\$7.6)	(47.2)
Biotechnology ³							\$5.2	15.1	\$4.0	13.7	\$4.0	13.7	\$2.3	10.8	(\$1.7)	(2.9)
Total	\$27.8	139.5	\$30.4	123.4	\$26.0	122.2	\$25.6	126.3	\$26.9	137.4	\$27.3	137.4	\$27.6	136.3	\$0.3	(1.1)

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

¹ Beginning in FY 2005, resources to support human health FQPA research were shifted to the Human Health MYP under the Human Health and Ecosystems Program/Project. No adverse impacts as research continued

² Represents resources associated with persistent bioaccumulative toxics (PBTs). In FY 2006, these resources were redirected to support the Advanced Monitoring Initiative.

³ In FY 2009, ORD revised its Long Term Goal structure within the SP2 program. This was made retroactive to the FY 2008 Enacted.

Research: Sustainability Program/Project by Research Area
(Dollars in Millions)

ORD Multi-Year Plan ORD Long-Term Goal	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Pollution Prevention/Sustainability¹	\$38.6	119.2	\$29.1	80.9	\$23.9	77.3	\$23.5	76.2	\$21.2	70.8	\$27.4	70.8	\$25.3	70.7	(\$2.1)	(0.1)
Pollution Prevention Tools	\$20.4	74.7	\$11.2	34.1	\$9.5	31.6										
Green Chemistry and Engineering	\$5.3	23.1	\$6.6	26.8	\$5.0	23.8										
Environmental Technology Verification (ETV)	\$3.2	6.0	\$3.0	4.7	\$1.6	7.7										
Environmental Systems Management	\$2.1	9.7	\$2.5	9.6	\$2.2	8.9										
Small Business Innovation Research (SBIR)	\$7.5	5.7	\$5.8	5.7	\$5.6	5.3										
Metrics and Indicators ¹							\$5.6	23.9	\$5.3	22.5	\$5.6	22.5	\$5.7	23.0	\$0.2	0.5
Decision Support Tools ¹							\$7.0	29.1	\$6.2	25.7	\$11.6	25.7	\$12.7	24.6	\$1.1	(1.1)
Technology: SBIR; People, Prosperity and the Planet (P3); ETV ¹							\$10.9	23.2	\$9.7	22.6	\$10.2	22.6	\$6.9	23.2	(\$3.3)	0.6
Socioeconomics²	\$2.4	3.0	\$2.3	3.0	\$2.3	3.0										
Valuation of health and ecosystem benefits	\$1.1	1.5	\$0.2	1.5	\$1.2	1.5										
Environmental compliance behavior and decision making	\$1.4	1.5	\$0.2	1.5	\$0.2	1.5										
Valuation of environment and health			\$1.0	0.0												
Market mechanism and economic incentives			\$0.9	0.0	\$1.0	0.0										
Total	\$41.0	122.2	\$31.4	83.9	\$26.2	80.3	\$23.5	76.2	\$21.2	70.8	\$27.4	70.8	\$25.3	70.7	(\$2.1)	(0.1)

Note: Includes estimates of workforce support costs, totals may not add due to rounding.

¹ In FY 2009, ORD revised its Long Term Goal structure within the Sustainability program. This was made retroactive to the FY 2008 Enacted. In addition, consistent with strategic planning efforts, ORD refocused the program from pollution prevention to sustainability.

² In FY 2008, the Economic Decision Sciences/Socioeconomics program was shifted to the Office of Policy, Economics, and Innovation (OPEI).

ORD Nanotechnology Research by Program/Project

EPA Program/Project	FY 2005 Enacted		FY 2006 Enacted		FY 2007 Enacted		FY 2008 Enacted		FY 2009 Enacted		FY 2010 Enacted		FY 2011 President's Budget		FY 2011 vs. FY 2010 Enacted	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Research: Human Health and Ecosystems	\$5.0	0.0	\$3.9	0.0	\$8.2	3.6	\$8.4	3.6	\$13.3	7.6	\$13.7	7.6	\$13.9	10.6	\$0.2	3.0
Research: Sustainability	\$0.6	3.0	\$0.6	3.0	\$0.2	1.0	\$0.2	1.0	\$0.2	1.0	\$0.2	1.0	\$0.2	1.0	\$0.0	0.0
Research: Clean Air					\$0.2	1.0	\$0.2	1.0	\$0.2	1.0	\$0.2	1.0	\$0.2	1.0	\$0.0	0.0
Research: Land Protection and Restoration							\$1.6	16.0	\$2.7	23.2	\$3.7	23.2	\$3.7	25.2	\$0.0	2.0
Research: Fellowships													\$2.0	0.0	\$2.0	0.0
Total	\$5.6	3.0	\$4.5	3.0	\$8.6	5.6	\$10.4	21.6	\$16.4	32.8	\$17.8	32.8	\$20.1	37.8	\$2.3	5.0

Note: Nanotechnology research cuts across ORD's budget structure; the resources in this table are included in other programs' budget trend tables. Includes estimates of workforce support costs. Totals may not add due to rounding.